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TI Sulfate-free hydraulic binders for mortar and concrete mixes  
IN Mitkova, Darina  
PA Dyckerhoff A.-G., Germany  
SO Ger. Offen., 8 pp.  
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	ES 2158718	T3	20010901	ES 1999-117564	19990906
	PT 1004556	T	20011030	PT 1999-117564	19990906
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CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 19854476	ICM	C04B028-02
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AB The title binders consist of (a) .gtoreq.1 fine sulfate-free hydraulic binder esp. **portland cement** clinker or limestone powder, (b) .gtoreq.1 sulfonate-contg. setting retardant 0.4-4 wt.%, (c) .gtoreq.1 setting accelerator .apprx.1.5 wt.%, and (d) .gtoreq.1 sulfonate-free **superplasticizer** (e.g., polyacrylate, polycarboxylate, or polyaspartic acid) 0.25-3 wt.%. The sulfonate-contg. setting retardant is selected from lignosulfonate, sulfonic acid, sulfonic soap, alkylbenzolsulfonate, naphthalenesulfonate, or melamineformaldehyde. The setting accelerator is selected from alkali carbonates or bicarbonates. The water wt. part in fluid concrete or mortar mixes based on these binders is 0.3-0.6, esp. 0.35-0.45.

ST hydraulic binder cement fluid concrete mortar

IT Setting agents

- Portland cement  
- superplasticizer  
- polyacrylate

Claims 1, 2, 4, 9-11